

Strengthening the Public Research Agenda for Social Determinants of Health

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As the nation's health research agency, the mission of the NIH is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce the burdens of illness and disability. In addition to improving our understanding of the biological bases of health and disease, NIH-supported research demonstrates the compelling influence of social determinants on health outcomes. Across the life span, social and environmental contexts can affect rates of incidence, prevalence, mortality, and burden of diseases. Reports from the Institute of Medicine (IOM),^{1,2} WHO Commission on Social Determinants of Health,³ and the Robert Wood Johnson Foundation (RWJF) Commission to Build a Healthier America⁴ agree that social determinants are not only contributing factors for risk and resilience for health, but are important considerations for interventions beyond the individual to macro levels including neighborhoods, communities, and public policy.

Recent scientific research discoveries on genes and behavior have stimulated five priority areas set forth by the 16th director of NIH, Dr. Francis Collins: (1) the development of high-throughput technologies; (2) the rapid translation of research into medicine and treatment; (3) healthcare reform; (4) global health; and (5) strengthening the biomedical research community.⁵ Given the disparities in the health of underserved, socially and economically disadvantaged populations in the U.S., an expanded research agenda on the social determinants of health disparities has particular relevance for the NIH healthcare reform priority area. The establishment of the NIH National Center on Minority Health and Health Disparities in 2000 was a critical milestone in the public health research agenda, as is its recent transition to become the National Institute on Minority Health and

Health Disparities (NIMHD). The NIH Strategic Research Plan and Budget to Reduce and Ultimately Eliminate Health Disparities has provided trans-NIH coordination for health disparities across populations and disease, and for the promotion of health.⁶

National Institutes of Health research strives to accelerate the translation of scientific discoveries into practice within communities⁷ across the nation's diverse socioeconomic strata and racial/ethnic minority populations. Given the projections for the increasing diversity of the U.S. population, number of children in poverty, and proportion of uninsured,⁸ health gaps may widen without new knowledge and its swift translation and dissemination into healthcare practice and reform. NIH guidelines on inclusion of women, minorities, and children promote participation of heterogeneous, diverse populations in clinical research to provide essential data on health disparities and effective interventions to reduce disparities across the lifespan. Racial/ethnic minorities are willing to engage in clinical research,⁹ and community-based participatory research (CBPR) is a successful strategy to engage diverse communities in the research process.

Similar to NIH, national agencies and organizations including the Agency for Healthcare Research and Quality (AHRQ),¹⁰ Substance Abuse and Mental Health Services Administration, American Public Health Association, and RWJF Commission to Build a Healthier America⁴ recognize the value of partnering opportunities to hasten the translation of scientific research knowledge into practice. The inclusion of community members on scientific teams is encouraged. Funding opportunities for community-based participatory research have forged new alliances to address health disparities.^{11,12} The NIMHD Community-Based Participatory Research Initiative has set forth three phases of action for research opportunities to advance community partnerships.¹³ Phase I includes research planning and community partnership development. In Phase II, intervention research grants build on strengthened academic community partnerships. And finally, Phase III provides dissemination grants to target health disparities in racial/ethnic minorities or other underserved populations based on demonstrated effective interventions.¹³ The American Recovery

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and Reinvestment Act of 2009 (Public Law 111-5) provided an opportunity for NIMHD to designate additional funds for new CBPR planning grants for intervention research on health disparities.

The Office of Behavioral and Social Sciences Research (OBSSR), in partnership with NIH institutes and centers, has also developed funding opportunity announcements (FOAs) to stimulate CBPR in general and in medically underserved communities specifically,¹⁴ and others to support behavioral and social science research to understand and eliminate health disparities.¹⁵ As articulated in its strategic prospectus, OBSSR advocates a systems science approach to study the complexity—from “cells to society”—of the determinants of health,¹⁶ and supports the Network on Inequality, Complexity, and Health, an interdisciplinary leadership network of researchers who together will establish the feasibility, utility, and importance of applying complex systems approaches to health disparities and related aspects of population health.¹⁵

A newly created trans-NIH collaboration, the Basic Behavioral and Social Science Opportunity Network (OppNet), has expanded research funding on basic mechanisms of behavior and social processes and how they may interact with each other, with biology, and with the environment.¹⁷ OppNet FOAs will solicit innovative research projects on the effects of the social environment and health, and on the mechanistic processes linking psychosocial stressors and behavior.^{18,19} Identification of basic mechanisms of behavior and social processes will lay the foundations to develop interventions for individuals, families, and communities to improve population health.

Social and economic disparities in U.S. health are longstanding, and health disparities have been widening. The complexities of social determinants influence genetic and environmental risk and protective mechanisms for disease, shape translation of successful prevention and treatments into practice, and affect overall health care.²⁰ NIH research programs and policies on health disparities address the research gaps and inform the ground-breaking *Beyond Health Care: New Directions to a Healthier America*⁴ to alter the trajectory of U.S. health in the age of healthcare reform. As the public health agenda is advanced and far-reaching revolutionary healthcare reform is implemented, researchers are asked to consider the following:

1. basic science studies to elucidate the mechanisms underlying biological, behavioral, and social determinants of health and health disparities;
2. developmental origins of health disparities, potentially arising from the interplay of genetic and environmental (i.e., physical, behavioral, and social environmental) influences in early and formative development;

3. transdisciplinary research strategies and the science of dissemination for health disparities^{16,21};
4. increased efforts for the inclusion of racial/ethnic minorities and underserved populations in research;
5. novel and culturally sensitive methodologies to track healthcare status among underserved populations and healthcare reform within communities;
6. strengthening of community-based participatory research partnerships.

The RWJF Commission to Build a Healthier America has set forth an ambitious agenda for public health.⁴ It is time to affirm our strong, expansive research agenda that social determinants matter and have an impact on our nation's health.

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